



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2012-0109; Directorate Identifier 2010-NM-244-AD]

RIN 2120-AA64

Airworthiness Directives; Bombardier Inc. Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to supersede an existing airworthiness directive (AD) that applies to certain Bombardier Inc. Model CL-215-1A10 and CL-215-6B11 (CL-215T Variant) airplanes. The existing AD currently requires repetitive inspections to detect cracking of the lower cap of the wing front and rear spars at wing station (WS) 51.00, and the wing lower skin. Additional actions, if cracking is found, include reworking the lower cap of the front or rear spar, inspecting for cracking, and repairing any cracking. The existing AD also requires reporting inspection results. Since we issued that AD, we have received reports of cracking found outside the inspection area. This proposed AD would extend the inspection area of the rear spar lower cap from WS 51.00 to WS 49.50 and modify the ultrasonic inspection calibration procedure. We are proposing this AD to detect and correct cracking of the lower caps of the wing front spar and rear spar, and lower wing skin, which could result in reduced structural integrity of the airplane.

DATES: We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: (202) 493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.
- Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact Bombardier, Inc., 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; phone: 514-855-5000; fax: 514-855-7401; e-mail: thd.crj@aero.bombardier.com; Internet: <http://www.bombardier.com>. You may review copies of the referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the

regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone (800) 647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: George Duckett, Aerospace Engineer, Airframe and Mechanical Systems Branch, ANE-171, FAA, New York Aircraft Certification Office, 1600 Stewart Avenue, Westbury, NY 11590, Westbury, New York 11590; telephone (516) 228-7325; fax (516) 794-5531.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2012-0109; Directorate Identifier 2010-NM-244-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD based on those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

Discussion

On August 24, 2005, we issued AD 2005-18-05, Amendment 39-14245

(70 FR 52009, September 1, 2005). That AD required actions intended to address an unsafe condition on Bombardier, Inc. Model CL-215-1A10, CL-215-6B11 (CL-215T Variant), and CL-215-6B11 (CL-415 Variant) airplanes.

Since we issued AD 2005-18-05, Amendment 39-14245 (70 FR 52009, September 1, 2005) Transport Canada Civil Aviation (TCCA), which is the airworthiness authority for Canada, has issued Airworthiness Directive CF-1992-26R2, dated September 1, 2010 (referred to after this as “the MCAI”), to correct an unsafe condition for the specified products. The MCAI states:

Cracks have been found in the rear spar of the left wing at Wing Station (WS) 51.00 on several aircraft in service. On some aircraft, the cracks propagated through the lower spar cap and fail-safe straps into the spar web and the lower wing skin. The cracks are not visible from outside the aircraft.

* * * * *

Revision 2 of this [TCCA] AD is issued as a result of cracks found outside the inspection area specified in Revision 1. This revision extends the inspection area of the rear spar lower cap from WS 51.00 to WS 49.50 and to modify the ultrasonic inspection calibration procedure.

Cracking of the lower caps of the wing front spar and rear spar, and lower wing skin, could result in reduced structural integrity of the airplane. You may obtain further information by examining the MCAI in the AD docket.

AD 2005-18-05, Amendment 39-14245 (70 FR 52009, September 1, 2005), specifies Model CL-215-6B11 (CL-415 Variant) airplanes in the applicability, but also specifies serial numbers 1001 through 1125. The serial numbers for Model CL-215-6B11 (CL-415 Variant) airplanes start at 2001. We have determined that Model CL-215-6B11 (CL-415 Variant) airplanes are not subject to the identified unsafe condition. Therefore,

we have removed Model CL-215-6B11 (CL-415 Variant) airplanes from the applicability of this proposed AD.

Relevant Service Information

Bombardier Inc. has issued Alert Service Bulletin 215-A454, Revision 4, dated November 18, 2009. The actions described in this service information are intended to correct the unsafe condition identified in the MCAI.

FAA's Determination and Requirements of This Proposed AD

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with the State of Design Authority, we have been notified of the unsafe condition described in the MCAI and service information referenced above. We are proposing this AD because we evaluated all pertinent information and determined an unsafe condition exists and is likely to exist or develop on other products of the same type design.

Costs of Compliance

Based on the service information, we estimate that this proposed AD would affect about 7 products of U.S. registry.

The actions that are required by AD 2005-18-05, Amendment 39-14245 (70 FR 52009, September 1, 2005) and retained in this proposed AD take about 17 work-hours per product, at an average labor rate of \$85 per work hour. Based on these figures, the estimated cost of the currently required actions is \$1,445 per product.

We estimate that it would take about 6 work-hour per product to comply with the new basic requirements of this proposed AD. The average labor rate is \$85 per work-hour. Based on these figures, we estimate the cost of the proposed AD on U.S. operators to be \$3,570, or \$510 per product.

In addition, we estimate that any necessary follow-on actions would take about 480 work-hours for a cost of \$40,800 per product. We have received no definitive data that would enable us to provide a parts cost estimate for the on-condition requirement specified in this proposed AD. We have no way of determining the number of products that may need these actions.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

1. Is not a "significant regulatory action" under Executive Order 12866;

2. Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and

3. Will not affect intrastate aviation in Alaska; and

4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a regulatory evaluation of the estimated costs to comply with this proposed AD and placed it in the AD docket.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by removing Amendment 39-14245 (70 FR 52009, September 1, 2005) and adding the following new AD:

Bombardier, Inc.: Docket No. FAA-2012-0109; Directorate Identifier 2010-NM-244-AD.

(a) Comments Due Date

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

This AD supersedes AD 2005-18-05, Amendment 39-14245 (70 FR 52009, September 1, 2005).

(c) Applicability

This AD applies to the Bombardier Inc. airplanes; certificated in any category; as identified in paragraphs (c)(1) and (c)(2) of this AD.

(1) Model CL-215-1A10 (Water Bomber) airplanes, serial numbers 1001 through 1125 inclusive.

(2) Model CL-215-6B11 (CL215T Variant) airplanes, serial numbers 1056 through 1125 inclusive.

(d) Subject

Air Transport Association (ATA) of America Code 57: Wings.

(e) Reason

This AD was prompted by reports of cracking found outside the inspection area. We are proposing this AD to detect and correct cracking of the lower caps of the wing front spar and rear spar, and lower wing skin, which could result in reduced structural integrity of the airplane.

(f) Compliance

You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

**RESTATEMENT OF CERTAIN REQUIREMENTS OF AD 98-04-08,
AMENDMENT 39-10321 (63 FR 7640, FEBRUARY 17, 1998), WITH NEW
SERVICE INFORMATION**

(g) Initial Inspection of AD 98-04-08, Amendment 39-10321 (63 FR 7640, February 17, 1998), with New Threshold

At the time specified in paragraph (h) of this AD: Perform an ultrasonic inspection to detect cracking of the lower cap of the wing front and rear spars at wing station 51, in accordance with the Accomplishment Instructions of Canadair Alert Service Bulletin 215-A463, Revision 1, dated May 25, 1995, or Bombardier Alert Service Bulletin 215-A463, Revision 2, dated March 13, 2001 (for the front spar); and Canadair Alert Service Bulletin 215-A454, Revision 1, dated May 25, 1995, Bombardier Alert Service Bulletin 215-A454, Revision 2, dated January 27, 1999, Bombardier Alert Service Bulletin 215-A454, Revision 3, dated March 13, 2001, or Bombardier Alert Service Bulletin 215-A454, Revision 4, dated November 18, 2009 (for the rear spar). As of the effective date of this AD, the inspection must be done in accordance with the Accomplishment Instructions of Bombardier Alert Service Bulletin 215-A463, Revision 2, dated March 13, 2001 (for the front spar); and Bombardier Alert Service Bulletin 215-A454, Revision 3, dated March 13, 2001, or Bombardier Alert Service Bulletin 215-A454, Revision 4, dated November 18, 2009 (for the rear spar).

(h) Compliance Times

Do the inspections required by paragraph (g) of this AD at the earlier of the times specified in paragraphs (h)(1) and (h)(2) of this AD.

(1) Prior to the accumulation of 3,000 total flight hours, or within 25 flight hours after March 4, 1998 (the effective date of AD 98-04-08, Amendment 39-10321 (63 FR 7640, February 17, 1998)), whichever occurs later.

(2) At the later of the times specified in paragraphs (h)(2)(i) and (h)(2)(ii) of this AD.

(i) Prior to the accumulation of 2,500 total flight hours, or 8,000 total water drops, whichever occurs first.

(ii) Within 50 flight hours or 150 water drops after October 6, 2005 (the effective date of AD 2005-18-05, Amendment 39-14245 (70 FR 52009, September 1, 2005), whichever occurs first.

(i) Repetitive Inspections with New Intervals

Repeat the ultrasonic inspection specified in paragraph (g) of this AD at the times specified in paragraph (i)(1) or (i)(2) of this AD, as applicable.

(1) For airplanes on which any ultrasonic inspection required by paragraph (a) of AD 98-04-08, Amendment 39-10321 (63 FR 7640, February 17, 1998), has been done before October 6, 2005: Within 600 flight hours after the last ultrasonic inspection, do the ultrasonic inspection specified in paragraph (g) of this AD. Repeat the ultrasonic inspection specified in paragraph (g) of this AD thereafter at intervals not to exceed 600 flight hours or 2,000 water drops, whichever occurs first.

(2) For airplanes on which the ultrasonic inspection required by paragraph (a) of AD 98-04-08, Amendment 39-10321 (63 FR 7640, February 17, 1998), has not been done before October 6, 2005: After accomplishing the initial ultrasonic inspection specified in paragraph (g) of this AD, repeat the ultrasonic inspection specified in paragraph (g) of this AD thereafter at intervals not to exceed 600 flight hours or 2,000 water drops, whichever occurs first.

RESTATEMENT OF REQUIREMENTS OF AD 2005-18-05, AMENDMENT 39-14245 (70 FR 52009, SEPTEMBER 1, 2005), WITH NEW SERVICE INFORMATION

(j) Ultrasonic Inspection

At the later of the times specified in paragraphs (j)(1) and (j)(2) of this AD, do an ultrasonic inspection for cracks of the wing lower skin, in accordance with the Accomplishment Instructions of Bombardier Alert Service Bulletin 215-A454, Revision 3, dated March 13, 2001; or Bombardier Alert Service Bulletin 215-A454, Revision 4, dated November 18, 2009. Thereafter, do the ultrasonic inspection for cracks of the wing lower skin at the times specified for the ultrasonic inspection in paragraph (i) of this AD.

(1) Within 50 flight hours or 150 water drops after October 6, 2005, whichever occurs first.

(2) Before further flight after accomplishing the first ultrasonic inspection required by paragraph (g) or (i) of this AD after October 6, 2005.

(k) Cracking Detected

If any cracking is detected during any inspection required by paragraph (g), (i), or (j) of this AD, before further flight, accomplish paragraphs (k)(1) and (k)(2) of this AD.

(1) Rework the lower cap of the front or rear spar, as applicable, in accordance with the Accomplishment Instructions of Bombardier Alert Service Bulletin 215-A463, Revision 2, dated March 13, 2001 (for the front spar); and Bombardier Alert Service Bulletin 215-A454, Revision 3, dated March 13, 2001; or Bombardier Alert Service Bulletin 215-A454, Revision 4, dated November 18, 2009 (for the rear spar).

(2) After doing the rework specified in paragraph (k)(1) of this AD, do a general visual inspection, from inside the wing box, to detect cracks of the front spar web or rear

spar web, as applicable, and the lower skin area, in accordance with the Accomplishment Instructions of Bombardier Alert Service Bulletin 215-A463, Revision 2, dated March 13, 2001 (for the front spar); and Bombardier Alert Service Bulletin 215-A454, Revision 3, dated March 13, 2001 (for the rear spar); or Bombardier Alert Service Bulletin 215-A454, Revision 4, dated November 18, 2009 (for the rear spar). If any cracking is detected: Before further flight, repair in accordance with a method approved by the Manager, New York Aircraft Certification Office (ACO), FAA; or Transport Canada Civil Aviation (TCCA) (or its delegated agent).

(l) Credit for Actions Accomplished in Accordance with Previous Service Information

(1) Actions accomplished before October 6, 2005, in accordance with Canadair Alert Service Bulletin 215-A463, dated April 8, 1993; Canadair Alert Service Bulletin 215-A463, Revision 1, dated May 25, 1995; Canadair Alert Service Bulletin 215-A454, dated October 13, 1993; Canadair Alert Service Bulletin 215-A454, Revision 1, dated May 25, 1995; Bombardier Alert Service Bulletin 215-A454, Revision 2, dated January 27, 1999; are considered acceptable for compliance with the corresponding actions specified in this AD.

(2) Actions accomplished before October 6, 2005, in accordance with Bombardier Alert Wire 215-A454, dated December 23, 1992; and Bombardier Alert Wire 215-A463, dated March 26, 1993; are considered acceptable for compliance with the corresponding actions specified in this AD.

(m) Reporting Requirement

For any inspection required by AD 2005-18-05, Amendment 39-14245 (70 FR 52009, September 1, 2005), that is accomplished after October 6, 2005, within 30 days after accomplishing the inspection, submit a report of any inspection results (both

positive and negative findings) to Bombardier, Inc., Canadair, Aerospace Group, P.O. Box 6087, Station Centre-ville, Montreal, Quebec H3C 3G9, Canada; or to Bombardier, Inc., 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; telephone 514-855-5000; fax 514-855-7401; e-mail thd.crj@aero.bombardier.com; Internet <http://www.bombardier.com>. As of the effective date of this AD, submit reports to Bombardier, Inc., 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; telephone 514-855-5000; fax 514-855-7401; e-mail thd.crj@aero.bombardier.com; Internet <http://www.bombardier.com>

NEW REQUIREMENTS OF THIS AD:

(n) Ultrasonic Inspection of the Rear Spar Lower Cap

Within the compliance time specified in paragraph (p) of this AD: Perform an ultrasonic inspection to detect cracking of the right and left wing rear spar lower cap between wing station (WS) 51.00 and WS 49.50, in accordance with paragraph 2.C., “Part A,” of the Accomplishment Instructions of Bombardier Alert Service Bulletin 215-A454, Revision 4, dated November 18, 2009. Repeat the ultrasonic inspection thereafter at intervals not to exceed 600 flight hours or 2,000 water drops, whichever comes first. Accomplishment of the actions in this paragraph terminates the inspection requirements of the lower cap of the wing rear spars at wing station 51.00 of paragraph (g) of this AD. Accomplishment of the actions in this paragraph does not terminate the inspection requirements of the lower cap of the front wing spars at wing station 51.00 required by paragraph (g) of this AD.

(1) If any crack is found in the rear spar lower cap, before further flight, do a general visual inspection for cracks from inside the wing box, of the areas of the rear spar web and the wing lower skin adjacent to the crack in the rear spar lower cap, in

accordance with paragraph 2.C., “Part A,” of the Accomplishment Instructions of Bombardier Alert Service Bulletin 215-A454, Revision 4, dated November 18, 2009.

(2) If any cracking is detected during any ultrasonic or general visual inspection required by paragraph (n) of this AD, before further flight, repair in accordance with a method approved by the Manager, New York ACO, FAA; or TCCA (or its delegated agent).

(o) Ultrasonic Inspection of the Lower Wing Skin

Within the compliance time specified in paragraph (p) of this AD: Perform an ultrasonic inspection to detect cracking of the wing lower skin underneath the drag angle between the front spar and the rear spar at the left and right WS 51.00, in accordance with paragraph 2.D., “Part B,” of the Accomplishment Instructions of Bombardier Alert Service Bulletin 215-A454, Revision 4, dated November 18, 2009. Do the ultrasonic inspection thereafter at intervals not to exceed 600 flight hours or 2,000 water drops, whichever comes first. Accomplishment of the actions in this paragraph terminates the requirements of paragraph (j) of this AD.

(1) If any crack is found in the wing lower skin, before further flight, do a general visual inspection for cracks from inside the wing box, i.e., the stringers adjacent to the skin crack in accordance with paragraph 2.D., “Part B,” of the Accomplishment Instructions of Bombardier Alert Service Bulletin 215-A454, Revision 4, dated November 18, 2009.

(2) If any cracking is detected during any ultrasonic or general visual inspection required by paragraph (o) of this AD, before further flight, repair in accordance with a method approved by the Manager, New York ACO, FAA; or TCCA (or its delegated agent).

(p) Compliance Times for Paragraphs (n) and (o) of this AD

At the later of the times specified in paragraphs (p)(1) and (p)(2) of this AD.

(1) Prior to the accumulation of 2,500 total flight hours, or 8,000 total water drops, whichever occurs first.

(2) Within 50 flight hours or 150 water drops after the effective date of this AD, whichever occurs first.

(q) Credit for Actions Accomplished in Accordance with Previous Service Information

Inspections accomplished at WS 51.00 before the effective date of this AD in accordance with the Accomplishment Instructions of Bombardier Alert Service Bulletin 215-A454, Revision 3, dated March 13, 2001, within the last 550 flight hours or 1,850 water drops, are considered acceptable for compliance with the corresponding action specified in paragraph (o) of this AD.

(r) Reporting Requirements with New Address

At the applicable time specified in paragraph (r)(1) or (r)(2) of this AD, submit a report of the findings (both positive and negative) of the inspection required by paragraphs (n) and (o) of this AD to Bombardier, Inc., in accordance with Bombardier Alert Service Bulletin 215-A454, Revision 4, dated November 18, 2009.

(1) If the inspection was done on or after the effective date of this AD: Submit the report within 30 days after the inspection.

(2) If the inspection was done before the effective date of this AD: Submit the report within 30 days after the effective date of this AD.

(s) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) **Alternative Methods of Compliance (AMOCs):** The Manager, New York ACO, ANE-170, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO, 1600 Stewart Avenue, Suite 410, Westbury, New York 11590; phone: 516-228-7300; fax: 516-794-5531. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.

(2) **Airworthy Product:** For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

(3) **Reporting Requirements:** A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2120-0056. Public reporting for this collection of information is estimated to be approximately 5 minutes per

response, including the time for reviewing instructions, completing and reviewing the collection of information. All responses to this collection of information are mandatory. Comments concerning the accuracy of this burden and suggestions for reducing the burden should be directed to the FAA at: 800 Independence Ave. SW, Washington, DC 20591, Attn: Information Collection Clearance Officer, AES-200.

(t) Related Information

Refer to MCAI Airworthiness Directive CF-1992-26R2, dated September 1, 2010, and the following service information for related information.

(1) Bombardier Alert Service Bulletin 215-A463, Revision 2, dated March 13, 2001.

(2) Bombardier Alert Service Bulletin 215-A454, Revision 3, dated March 13, 2001.

(3) Bombardier Alert Service Bulletin 215-A454, Revision 4, dated November 18, 2009.

Issued in Renton, Washington, on January 26, 2012.

Kalene C. Yanamura,
Acting Manager,
Transport Airplane Directorate,
Aircraft Certification Service.

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